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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,209

01/21/2004

Kia Silverbrook

MPA17US

1357

24011 7590 04/23/2007
SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, 2041
AUSTRALIA

EXAMINER

UHLENHAKE, JASON S

ART UNIT

PAPER NUMBER

2853

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/760,209

Applicant(s)

SILVERBROOK ET AL.

Examiner

Jason Uhlenhake

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al (U.S. Pat. 6,439,908)

Silverbrook ('908) discloses:

- ***regarding claim 1***, at least one printhead module (10 of Figure 2) comprising at least two, separate printhead integrated circuits (18 of Figure 4), each of the printhead integrated circuits having nozzles formed therein for delivering printing fluid onto the surface of the print media (Column 3, Lines 45 – 47), one elongate support member (16 of Figures 3, 7) supporting the at least two printhead integrated circuits, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (Column 3, Lines 49-50, 59-65)
- drive electronics incorporating at least one controller arranged to control the printing operation of a selectable number of the at least two printhead integrated circuits via the electrical connector (Column 3, Lines 48-50, 59-65)
- a casing in which the at least one printhead module and the drive electronics are removably mounted, the at least one printhead module being

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removably mounted to the casing at the elongate support member (Column 1,

Line 65 – Column 2, Line 5)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al (U.S. Pat. 6,439,908) in view of Silverbrook (U.S. Pat. 6,916,082).

Silverbrook ('908) discloses:

- ***regarding claim 2***, at least one printhead module comprises one or more groups of four printhead integrated circuits (18 of Figure 4)
- ***regarding claim 3***, at least one printhead module comprises one or more groups of four printhead integrated circuits (18 of Figure 4)
- ***regarding claim 4***, at least one printhead module comprises one or more groups of eight printhead integrated circuits (18 of Figure 4)
- ***regarding claim 6***, at least one printhead module (10 of Figure 2) is formed as a unitary arrangement of the at least two printhead integrated circuits (18 of Figure 4), the support member (16 of Figures 3, 7), the electrical connector (48 of Figure 8), and at least one fluid distribution member (26 of

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Figure 7) mounting the at least two printhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel (80 of Figure 7) for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures (42 of Figure 7) extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all the printhead integrated circuits by way of respective ones of the fluid distribution members (Figure 7; Column 3, Lines 45 – 47)

Silverbrook ('908) does not disclose expressly the following

- ***regarding claim 2***, a single controller is selected for controlling each group of two printhead integrated circuits via the electrical connector
- ***regarding claim 3***, a single controller is selected for controlling each group of four printhead integrated circuits via the electrical connector
- ***regarding claim 4***, a single controller is selected for controlling each group of eight printhead integrated circuits via the electrical connector

Silverbrook ('082) discloses:

- ***regarding claim 2***, a single controller is selected for controlling each group of two printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 18), for the purpose of providing effective control of a number of printhead circuits/chips
- ***regarding claim 3***, a single controller is selected for controlling each group of four printhead integrated circuits via the electrical connector

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(Column 5, Lines 7 – 18), for the purpose of providing effective control of a number of printhead circuits/chips

- **regarding claim 4**, a single controller is selected for controlling each group of eight printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 18), for the purpose of providing effective control of a number of printhead circuits/chips

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Silverbrook ('082) into the device of Silverbrook ('908), for the purpose of controlling a number of printhead circuits/chips and replacing any defective modules.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook (U.S. Pat. 6,439,908) in view of Silverbrook (U.S. Pat. 6,916,082).

Silverbrook ('908) in view of Silverbrook ('082) discloses the claimed invention except for the following:

- **regarding claim 5**, the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector, since it has been held

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that mere duplication of the essential working parts of a device involves only routine skill in the art, for the purpose of improving the quality of printing. *St.*

Regis Paper Co. v. Bemis Co., 93 USPQ 8.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector as taught by Silverbrook ('908) in view of Silverbrook ('082), for the purpose of providing effective control of a number of printhead circuits/chips

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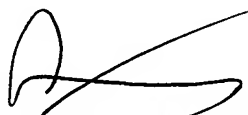
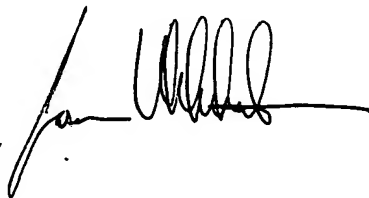
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSU
April 12, 2007



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER